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10/527,050	05/04/2005	Masaharu Tamatsu	050-401	6950

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

This Office action is issued in response to application filed May 4th, 2005

claiming the priority of PCT JP03/11592 filed Sep. 10, 2003.

Claims 1-30 are pending.

Claim Objections

Claim 19 is objected to because of the following informalities: in lines 3 the first

limitation "fore and aft record" should be corrected to "before and after". Appropriate

correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 18-21, 23-26, and 28-30, are rejected under 35 U.S.C. 112 6ht paragraph.
This section sets forth guidelines for the examination of 35 U.S.C. 112, sixth

paragraph, "means or step plus function" limitations in a claim. These guidelines are

based on the Office's current understanding of the law and are believed to be fully

consistent with binding precedent of the Supreme Court, the Federal Circuit and the

Federal Circuit's predecessor courts. These guidelines do not constitute substantive

rulemaking and hence do not have the force and effect of law.

The Court of Appeals for the Federal Circuit, in its en banc decision In re

Donaldson Co., 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994), decided that a "means-

or- step-plus-function" limitation should be interpreted in a manner different than patent

examining practice had previously dictated. The Donaldson decision affects only the

manner in which the scope of a "means or step plus function" limitation in accordance

with 35 U.S.C. 112, sixth paragraph, is interpreted during examination. Donaldson does

not directly affect the manner in which any other section of the patent statutes is

interpreted or applied.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamatsu

US Patent Application Publication No. 2003/0074600 filed Apr. 11, 2001 claimed the

priority of PCT JP01/03126 filed Apr. 12, 2000.

Regarding Claims 16, and 29, Tamatsu discloses a database reorganization

system, comprising:

data records for holding data entries, each data record contain a primary key (Paragraph 0118, lines 4-8, wherein the 'T log' corresponds to the primary key, Tamatsu);

primary blocks for storing data records in the order of the primary keys thereof (Paragraph 118, lines 8-11, Tamatsu);

overflow blocks linked to the primary blocks (Paragraph 129, lines 1-5, Tamatsu);

a current location table and a new location table for containing in contiguous regions entries describing the addresses of the primary blocks (Paragraph 124, Tamatsu);

a reorganization pointer for current location table (Paragraph 126, Tamatsu);

a final pointer for the current location table (Paragraph 124, lines 8-13, Tamatsu);

and a reorganization pointer for the new location table (Paragraph 127, Tamatsu).

Regarding Claim 17, Tamatsu discloses a database reorganization system wherein the database recognition system is configured to sequentially write entries in the current location table to the new location table (Paragraph 130, lines 1-5, Tamatsu) and, where any overflow block is present, to delink said overflow blocks, creating new entries corresponding to the primary blocks and adding the new entries to the new location table (Paragraph 130, lines 5-10, Tamatsu).

Regarding Claim 18, Tamatsu discloses a database reorganization system further comprising:

a first means for, upon receipt of a database reorganization command, creating a new location table in addition to the current location table (Paragraph 130, lines 5-7, Tamatsu); and

a second means for sequentially writing entries in the current location table to the new location table and, when an overflow blocks linked to a primary block is detected,

delinking that overflow blocks, adding new entries to the new location table, and

rendering the overflow blocks as new primary blocks (Paragraph 133, Tamatsu).

Regarding Claim 19, Tamatsu discloses a database reorganization system further

comprising:

means for shifting for and after records in primary blocks and eliminating

fragmentation when a storage rate in primary blocks falls outside a range of

predetermined values (Paragraph 131, lines 1-7, Tamatsu); and

means for sequentially writing entries in the current location table to the new

location table (Paragraph 131, lines 7-13, Tamatsu).

Regarding Claim 20, Tamatsu discloses a database reorganization system further

comprising:

means for sequentially writing entries in the current location table to the new

location table and maintaining in the primary blocks the initial storage rates used in the

primary blocks (Fig. 4A, Paragraph 133, lines 12-17, Tamatsu).

Regarding Claim 21, Tamatsu discloses a database reorganization system further

comprising:

a comparative means for, when retrieving a record by the primary key during

reorganization, comparing the value of the target primary key with the value of the

primary key of the record contained in the primary block and the overflow blocks of the

entry indicated by at least one of the reorganization pointers (Paragraph 135, lines 1-9,

Tamatsu); and

a retrieval means for using the current location table to retrieve the target record

when the value of the target primary key is found by the comparative means to be greater

than or equal to the value of the primary key of the record stored in the blocks indicated

by at least one of said reorganization pointers and for using the new location table to

retrieve the target record when it is found to be less than the value of the primary key

(Paragraph 135, lines 9-17, Tamatsu).

Regarding claim 22, Tamatsu discloses a database reorganization system,

comprising:

data records for holding data containing primary keys and alternate keys

(Paragraph 130, lines 1-7, Tamatsu);

alternate-key entries that hold data entries, each alternate-key entry comprises an

alternate key and a primary key (Paragraph 130, lines 7-9,Tamatsu);

alternate-key blocks for containing the alternate-key entries (Paragraph 130, lines

16-22, Tamatsu);

alternate-key overflow blocks linked to the alternate-key blocks(Paragraph 129,

lines 1-5, Tamatsu);

a current alternate-key location table and new alternate-key location tables for

containing alternate-key location table entries in contiguous regions (Paragraph 124,

Tamatsu);

a reorganization pointer for current alternate-key location table which indicates a

progress of recognition of the alternate-key location table and alternate-key blocks for the

current alternate-key location tables (Paragraph 126, Tamatsu);

a final pointer which indicates a final point of the most currently used entry of the

alternate-key location table for the current alternate-key location tables (Paragraph 124,

lines 8-13, Tamatsu); and

a reorganization pointer for the new alternate-key location table (Paragraph 127, Tamatsu).

Regarding Claim 23, Tamatsu discloses a database reorganization system further comprising:

means for sequentially writing entries in current alternate-key location tables to a new alternate-key location table and, where an alternate-key overflow blocks exists, delinking the alternate-key overflow blocks, creating new alternate-key location table entries corresponding to the alternate-key blocks and adding new alternate-key location table entries to a new alternate-key location table (Fig. 4A, Paragraph 133, lines 12-17, Tamatsu).

Regarding Claim 24, Tamatsu discloses a database reorganization system further comprising:

a first means for, upon receipt of a database reorganization command, creating a new alternate-key location table in addition to the current alternate-key location table (Paragraph 130, lines 1-5, Tamatsu); and

a second means for sequentially writing entries in the current alternate-key location table to the new alternate-key location table and, when alternate-key overflow block linked to alternate-key block is detected, delinking that alternate-key overflow block, adding new alternate-key location table entries to new alternate-key location table and rendering these as new alternate-key blocks (Paragraph 133, Tamatsu).

Regarding Claim 25, Tamatsu discloses a database reorganization system further comprising:

means for shifting fore and aft records in the alternate-key blocks and eliminating

fragmentation when the storage rate in the alternate-key blocks falls outside a range of

the specified values (Paragraph 131, lines 1-7, Tamatsu); and

means for sequentially writing entries in the current alternate-key location table to

new alternate-key location table (Paragraph 131, lines 7-13, Tamatsu).

Regarding Claim 26, Tamatsu discloses a database reorganization systems further

comprising:

a comparative means for, when retrieving a record by the alternate key during

reorganization, comparing the value of the target alternate key with the value of the

alternate key of the record contained in the alternate-key block of the entry indicated by

at least one of said reorganization pointer (Paragraph 135, lines1-9, Tamatsu); and

a retrieval means for using the current alternate-key location table to retrieve the

target record when the value of the target alternate key is found by the comparative

means to be greater than or equal to the value of the alternate key of the record stored in

the alternate-key blocks indicated by at least one of the reorganization pointer and for

using the new alternate-key location table to retrieve the target record when it is found to

be less than the value of that alternate key (Paragraph 135, lines 9-17, Tamatsu).

Regarding Claim 27, Tamatsu discloses a database system, comprising:

data records for holding data entries, each date record may contain primary keys

and zero or one or more alternate key (Paragraph 130, lines 1-7, Tamatsu);

primary blocks for storing data records in the order of the primary keys thereof;

alternate-key entries that holds data entries, each alternate key entries comprises an

alternate key and a primary key (Paragraph 130, lines 7-9,Tamatsu);

alternate-key blocks for containing the alternate-key entries (Paragraph

124,Tamatsu);

a current alternate-key location table for containing alternate-key location table

entries in contiguous regions (Paragraph 126, Tamatsu); and

means for storage of the alternate-key entries in the alternate-key blocks in the

order of their alternate keys and, when no further entries may be stored in the alternate-

key block, linkage of a new alternate-key overflow block to that alternate-key block and

storage in that alternate-key overflow block of alternate-key entries that cannot be stored

in the alternate-key block (Paragraph 131, Tamatsu).

Regarding Claim 28, Tamatsu discloses a database reorganization system further

comprising:

means for shifting fore and aft records in primary blocks and eliminating

fragmentation when the storage rate in primary blocks falls outside a range of specified

values (Paragraph 131, lines 1-7, Tamatsu);

contiguous regions joined for storage of the addresses of unused blocks resulting

from the elimination of fragmentation (Paragraph 144, lines 1-6, Tamatsu); and pointers

which indicates the start points and end points of those contiguous regions (Paragraph

144, lines 6-14, Tamatsu).

Regarding Claim 30, Tamatsu discloses a database reorganization system,

comprising:

data records for holding data entries, each data record may contain a primary key;

primary blocks for storing data records in the order of the primary key thereof (Paragraph

135, Tamatsu);

a first means, in a backup database reorganization system having a current

location table containing in a contiguous region entries describing the addresses of the

primary blocks, for creating, upon receipt of a database reorganization command, a new

location table in addition to the current location table (Paragraph 137, Tamatsu); and

a second means, in that backup database reorganization system, for sequentially

writing primary block entries in the current location table to the new location table and,

when an overflow block linked to a primary block is detected, delinking the overflow

block, adding new entries to the new location table and rendering these as new primary

blocks (Paragraph 141, Tamatsu).

Point of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sana Al-Hashemi whose telephone number is 571-272-4013. The examiner can normally be reached on 8Am-4:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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